

Case 3023

DASYPODIDAE Börner, 1919 (Insecta, Hymenoptera): proposed emendation of spelling to DASYPODAIDAE, so removing the homonymy with DASYPODIDAE Gray, 1821 (Mammalia, Xenarthra)

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Abstract. The family-group name DASYPODIDAE Börner, 1919 (Insecta, Hymenoptera) is a junior homonym of DASYPODIDAE Gray, 1821 (Mammalia, Xenarthra). It is proposed that the homonymy between the two names, which relate to short-tongued bees and armadillos respectively, should be removed by emending the stem of the generic name *Dasydoda* Latreille, 1802, on which the insect family-group name is based, to give DASYPODAIDAE, while leaving the mammalian name (based on *Dasypus* Linnaeus, 1758) unchanged. *Dasypus novemcinctus* Linnaeus, 1758, the type species of *Dasypus*, has a wide distribution in the southern United States, Central and South America. The genus *Dasydoda* ranges throughout most of the Palearctic region.

Keywords. Nomenclature; taxonomy; Hymenoptera; Mammalia; Xenarthra; bees; armadillos; DASYPODAIDAE; DASYPODIDAE; *Dasydoda*; *Dasypus*.

1. A colleague, Douglas Yanega, has brought to our attention the homonymous use of the family-group name DASYPODIDAE in the mammalian order Xenarthra and in the insect order Hymenoptera.

2. The mammalian family DASYPODIDAE Gray, 1821 (p. 305) was based on the armadillo genus *Dasypus* Linnaeus, 1758 (p. 50). Gray's family included the single genus; he misspelled the generic name as '*Dasipus*' and rendered the family-group name as '*Dasipidae*', which is corrected under Article 35d(i) of the Code.

3. Linnaeus (1758) included six nominal species in *Dasypus*. He placed the name '*Dasypus*' among the synonyms of *D. novemcinctus* (p. 51; the nine-banded armadillo) and this species is the type of the genus by Linnaean tautonymy (Article 68e(i)). Thomas (1911, p. 141) recorded that the account of the Mexican armadillo in Hernandez (1651), against which the generic name *Dasypus* appeared, referred to the *D. novemcinctus* group of species and that recognition of *D. novemcinctus* as the type species of *Dasypus* necessitated adopting *Dasypus* as the valid name for the genus long known (see, for example, Lydekker, 1887, pp. 140–141) as *Tatusia* Lesson, 1827

(p. 309) or, later, as *Tatu* Blumenbach, 1779 (p. 74; type species by monotypy *D. novemcinctus*), thereby rendering *Tatu* a junior objective synonym of *Dasypus*. Thomas noted that 'this is [an] instance in which the use of tautonymy in selecting Linnean types brings out a result contrary to common use'. He adopted the name *Euphractus* Wagler, 1830 (p. 36; type species *D. sexcinctus* Linnaeus, 1758 by subsequent designation by Palmer, 1904, p. 278) for *Dasypus* as hitherto understood (six-banded armadillos) and recorded that 'this shifting is quite unavoidable if the invaluable principle of tautonymy is to be utilized at all'.

4. Not all authors followed Thomas's (1911) switch of the name *Dasypus* from one group of armadillos to another; Patterson (1913), Vanneman (1917), Edgeworth (1923) and Cooper (1930), for example, used *Tatusia* for *novemcinctus*, and Apstein (1915) cited *D. sexcinctus* as the type of *Dasypus*. In 1945 Simpson (p. 193; see also p. 72, footnote) wrote: 'The application of the Linnean name *Dasypus* is unfortunately subject to confusion. Many writers, probably the majority, have used this name for the quirquinchos [six-banded armadillos], which would be desirable, both to follow usage and because this group of species is the most central and generalized among living forms. In this case the correct name for the nine-banded armadillos would be *Tatu* and so they have been widely called (by me among many others). Oldfield Thomas, however, attempted to fix *Dasypus* as the name for the nine-banded armadillos, making *Euphractus* valid for the quirquinchos. This is apparently gaining in authoritative usage (although it still appears to be open to debate) and is here reluctantly adopted'. Most recent authors have cited *D. novemcinctus* as the type species of *Dasypus* (see, for example, Cabrera, 1958, p. 223; Hall, 1981, p. 282; Gardner, 1993, p. 65). The designation of *D. septemcinctus* Linnaeus, 1758 as the type by Wetzel & Mondolfi (1979, pp. 44, 46), reported by McBee & Baker (1982, p. 1), is invalid. Linnaeus (1758) gave the locality of *D. novemcinctus* as 'in America meridionali'; the type locality was limited by Cabrera (1958, p. 225) to Pernambuco, Brazil. The name *Euphractus* Wagler, 1830 is currently in use for *D. sexcinctus* Linnaeus, 1758. Both *Dasypus* and *Euphractus* are placed in the DASYPODIDAE.

5. Linnaeus (1758) based *Dasypus novemcinctus* on six previous publications, including Hernandez's (1651) *Rerum medicarum Novae Hispaniae thesaurus* (p. 314) and Linnaeus's own (1754) *Museum Adolphi Friderici*, Class 1 (Quadrupedia; p. 6); all are identifiable as the nine-banded armadillo. Thomas (1911, pp. 141, 142) recorded that there were Linnean mammal specimens preserved in the Swedish Museum of Natural History, Stockholm, from information given to him by Prof Einar Lönnberg. This material was originally in the Crown Prince Adolf Fredrik collection (see Linnaeus, 1754) and includes specimens of *D. novemcinctus* and *D. sexcinctus*, catalogue nos. NRM 532077 and NRM 592711 respectively. These specimens have been authenticated as Linnean types by Dr Sven Kullander (Swedish Museum of Natural History) from good curatorial records originating from the Museum Adolphi Frederiki. A photograph of specimen NRM 532077 is available on the Website (Linnaeus server) in Stockholm (<http://linnaeus.nrm.se/zool>).

6. The insect subfamily DASYPODINAE Börner, 1919 (p. 180) was established for a group of bees based on *Dasyпода* Latreille, 1802 (p. 424). The genus included four nominal species, among them *Andrena hirtipes* Fabricius, 1793 (p. 312), and this species was designated the type by Blanchard (1840, p. 414). Fabricius

cited *A. hirtipes* as 'in Germania Dom Smidt'. Zimsen (1964, p. 414) listed seven specimens, which were originally in Kiel, in the Fabrician collections in the Zoologisk Museum in Copenhagen; Warncke (1973) mentioned a lectotype ('♀ Lectotypus, Kopenhagen') but gave no details. The species is widespread in Europe, from the U.K. to Russia. The subfamily name DASYPODINAE has been used in publications by Michener (1944, 1981), Stephen, Bohart & Torchio (1969), Michener & Brooks (1984) and Michener, McGinley & Danforth (1994). Alexander & Michener (1995, p. 422) adopted DASYPODIDAE at the family level.

7. The name DASYPODIDAE Gray, 1821 in addition to being much older than DASYPODIDAE Börner, 1919 has also been much more widely used than the latter. In addition to the works by Cabrera (1958), Hall (1981) and Gardner (1993) cited in para. 4 above, the mammal name has appeared in representative recent publications, covering biology, ecology and conservation, as well as taxonomy, by Findley, Harris, Wilson & Jones (1975), Wetzel (1985), Eisenberg (1989), Corbet & Hill (1991) and Mares & Schmidley (1991). *D. novemcinctus*, the type species of *Dasypus*, is widely distributed. The species is important in the subsistence economy of the area and in the manufacture of tourist goods. It is also valuable in medical research on leprosy and is well known for the propensity to give birth to monozygous quadruplets. We believe that there is good reason not to change the mammalian family-group name. We therefore propose that the insect name be emended to DASYPODAIDAE, while leaving the mammalian name unaltered.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that for the purposes of Article 29 of the Code the stem of the generic name *Dasyпода* Latreille, 1802 (Hymenoptera) is DASYPODA-;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Dasypus* Linnaeus, 1758 (gender: masculine), type species by Linnaean tautonomy *Dasypus novemcinctus* Linnaeus, 1758 (Xenarthra);
 - (b) *Dasyпода* Latreille, 1802 (gender: feminine), type species by subsequent designation by Blanchard (1840) *Andrena hirtipes* Fabricius, 1793 (Hymenoptera);
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *novemcinctus* Linnaeus, 1758, as published in the binomen *Dasypus novemcinctus* (specific name of the type species of *Dasypus* Linnaeus, 1758) (Xenarthra);
 - (b) *hirtipes* Fabricius, 1793, as published in the binomen *Andrena hirtipes* (specific name of the type species of *Dasyпода* Latreille, 1802) (Hymenoptera);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) DASYPODIDAE Gray, 1821, type genus *Dasypus* Linnaeus, 1758 (Xenarthra);
 - (b) DASYPODAIDAE Börner, 1919, type genus *Dasyпода* Latreille, 1802 (spelling emended by the ruling in (1) above) (Hymenoptera);
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Tatu* Blumenbach, 1779 (a junior objective synonym of *Dasypus* Linnaeus, 1758) (Xenarthra);

- (6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name DASYPODIDAE Börner, 1919 (spelling emended to DASYPODAIDAE by the ruling in (1) above) (Hymenoptera).

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